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EXAMINER

BELL, PAUL A

ART UNIT

PAPER NUMBER

2675

DATE MAILED: 07/11/2003

A 2

Please find below and/or attached an Office communication concerning this application or proceeding.

B

Office Action Summary

Application No.

09/752,817

Applicant(s)

YAMAZAKI ET AL.



Examiner

PAUL A BELL

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 21 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 5-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 9. 6) ☐ Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 23-28 and 34-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 23 recites the limitation "said corrected potential" in line 14. There is insufficient antecedent basis for this limitation in the claim.

Claim 34 recites the limitation "said corrected potential" in line 15. There is insufficient antecedent basis for this limitation in the claim.

Claims 24-28 and 35-39 are also rejected because they depend on a claim with a 112 problem.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5, 7-10, 12, 13-15, 17-20, 22-26, 28-31, 33-37 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kim et al. (6,265,833) in view of Stewart et al. (6,417,825).

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With regard to claim 5 Kim et al. teaches a display system comprising: a light-emitting device (figure 1, item 5) comprising plurality of pixels, each of said plurality of pixels having at least an EL element (column 1, lines 10-16 and column 9, lines 57-63); a sensor for obtaining an information signal of an environment (figure 1, item 1); a CPU for converting an electrical signal supplied from said sensor into a correction signal (figure 1, item 3); and a voltage changer for controlling a corrected potential based on said correction signal (figure 1, item 4).

With further regard to claim 5 Kim et al. does not illustrate the details of his EL display "item 5" device such as "wherein said voltage changer is electrically connected to the EL element of each of the plurality of pixels via a switch".

Stewart teaches; "wherein said voltage changer is electrically connected to the EL element of each of the plurality of pixels via a switch" (See Stewart et al. figure 2, item 120 shows the voltage changer and it is clear that it broadly has some type of "switch means" because column 4, lines 37-40 teaches; "The alternating current high voltage power source may also be varied in amplitude from a minimum peak-to-peak value to a maximum peak-to-peak value during the frame duration" so to summarize the "varied in amplitude" which constitutes the act of "switching" or "changing" the amplitude which broadly reads on the concept "via a switch" which can be broadly read to also be "via a change", also because without the switch how could the amplitude of the voltage changer "change" or "switch"). The broad some what functional language used in this claim does not limit the interpretation to what applicant illustrates in figure 1, item 2015 which illustrates a simple circuit breaker which function to

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connect or disconnect the voltage changer from the EL elements and has no control over what the value of the voltage changer is.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the EL matrix display details as illustrated by Stewart when implementing the system items 4 and 5 of Kim et al. because Kim et al. lacks these specific manufacturing details directed towards the actual EL circuit within the display therefore one of ordinary skill would have been motivated to simply use Stewart et al. when implementing items 4 and 5 system parts in the Kim et al. system illustrated, and further Stewart et al. gives motivation in column 4, lines 22-25 for using his details.

With regard to claim 7 the combination of Kim et al. and Stewart et al. teaches a display system according to claim 5, wherein said light-emitting device, said sensor, said CPU and said voltage changer are formed on a same substrate (See Kim et al. since figure 1 illustrates all the claimed parts in one illustration it is obvious that they are capable of sharing a common surface (substrate) while enclosed above said common surface of an enclosure).

With regard to claim 8 the combination of Kim et al. and Stewart et al. teaches a display system according to claim 5, wherein said light-emitting device is an EL display device (See Kim et al. figure 1, item 5, column 1, lines 10-15).

With regard to claim 9 the combination of Kim et al. and Stewart et al. teaches a display system according to claim 5, wherein said display system is incorporated in one selected from the group consisting of a video camera, a digital camera, a head-mount display, a car navigation

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system, a portable telephone, an image reproduction apparatus, a car audio equipment, and a personal computer (See Kim et al. column 10, lines 21-34 and further these specific uses of the display are viewed as merely being recitations directed towards an "OBVIOUS INTENDED USE" of the display).

With regard to claim 10 the combination of Kim et al. and Stewart et al. was shown above to read on most of these limitations and in addition the combination of Kim et al. and Stewart et al. teaches an EL element having two electrodes with an EL layer interposed therebetween (see Stewart et al. figure 1, item 108) ; a current control TFT electrically connected to one of said two electrodes of said EL element (see Stewart et al. Figure 1, item 112), wherein a potential applied to the other of said two electrodes of said EL element (figure 1, items 120 and 108).

With regard to claim 12 these limitations were addressed in claim 9.

With regard to claim 13 the combination of Kim et al. and Stewart et al. was shown above to read on most of these limitations and in addition the combination of Kim et al. and Stewart et al. teaches said thin film transistor comprising at least an active layer, and a gate electrode adjacent to said active layer with a gate insulating film interposed therebetween ; an EL element comprising at least an EL layer between an anode and a cathode, one of said anode and said cathode being electrically connected to said active layer (See Stewart et al. figure 1).

With regard to claim 14 these limitations were addressed in claim 7.

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With regard to claim 15 the combination of Kim et al. and Stewart et al. suggest an active matrix display device according to claim 13, wherein said sensor comprises a CCD or a photo-diode (See Kim et al. figure 1 item 1 an optical sensor responsive to light and since CCD or a photo-diode are both conventional they would have been an obvious choice to one of ordinary skill) .

With regard to claim 17 these limitations were addressed above in claim 9.

With regard to claims 18-20, 22-24, 26, 28-31, 33-35, 37, and 39 the combination of Kim et al. and Stewart et al. were shown above to read on these limitations.

With regard to claims 25 and 36 the combination of Kim et al. and Stewart 25 suggest an active matrix display device according to claim 23, further comprising an A/D converter interposed between said sensor and said CPU, and a D/A converter interposed between said CPU and said voltage changer (See Kim et al. figure 1 it is inherent that the CPU controller uses A/D for it's input and D/A for its output while interfacing with analog devices shown).

5. Claims 6, 11, 16, 21, 27, 32 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Kim et al. (6,265,833) and Stewart et al. (6,417,825) in view of Poulton (5,702,323).

With regard to claims 6, 11, 16, 21, 27, 32 and 38 the combination of Kim et al. and Stewart et al. does not teach "wherein said information signal comprises a user's living-body information".

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However Poulton teaches, “wherein said information signal comprises a user’s living-body information” (abstract, figure 5, item 230, column 2, lines 48-57, column 4, lines 3-10).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the optical sensor item 1 as illustrated by Kim to also keep track of body parts position as done by Poulton when implementing the system item 1 of Kim et al. because this limitation is merely directed towards an “OBVIOUS INTENDED USE” of the combination of Kim et al. and Stewart et al. as illustrated by Poulton, and further Poulton gives motivation in column 1, lines 5-10 for modifying the use the Kim item 1 which Poulton provided a further illustration of a additional “use” for the information given by a optical sensor.

Response to Arguments

6. Applicant's arguments (paper # 10 received 21 April 2003) with respect to claims 5-39 have been considered but are moot in view of the new ground(s) of rejection.

In view of amendments, the new reference Stewart et al. (6,417,825) was added for a new ground of rejection. Stewart clearly shows “connecting a voltage changer to the EL element of each pixel via a switch”. The examiner references the detailed rejection above.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Bell whose telephone number is (703) 306-3019. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Saras, can be reached at (703) 305-9720.

Any response to this action should be mailed to: Commissioner of Patents and Trademarks
Washington, D.C. 20231
or faxed to: (703) 872-9314

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist). Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.


Paul Bell

Art unit 2675
7 July 2003


CHANH NGUYEN
PRIMARY EXAMINER